

CLAIMS

1. An oncogene polynucleotide derived from human involving development of cervical cancer, comprising a nucleotide sequence encoding an amino acid sequence of SEQ. ID. No.1.

2. The polynucleotide as claimed in Claim 1 wherein the nucleotide sequence encoding the amino acid sequence of SEQ. ID. No.1 is a nucleotide sequence of SEQ. ID. No.2.

3. A recombinant peptide or its salts, comprising an amino acid sequence of SEQ. ID. No.1 or a partial amino acid sequence of the amino acid sequence.

4. A recombinant oncogenic protein comprising an amino acid sequence of SEQ. ID. No.1.

5. A recombinant vector comprising a polynucleotide encoding the recombinant peptide as claimed in Claim 3.

6. A recombinant vector comprising the polynucleotide as claimed in Claim 1 or 2.

7. A transformed cell produced by transforming a host cell using the recombinant vector as claimed in Claim 5.

8. A transformed cell produced by transforming a host cell using the recombinant vector as claimed in Claim 6.

9. A process for producing the recombinant peptide as claimed in Claim 3 or its salts comprising the steps of:

culturing the transformed cell as claimed in Claim 7

to allow the transformed cell to produce the recombinant peptide
5 as claimed in Claim 3; and

collecting the recombinant peptide produced from the
culture.

10. A process for producing the recombinant oncogenic
protein as claimed in Claim 4 comprising the steps of:

culturing the transformed cell as claimed in Claim 8
to allow the transformed cell to produce the recombinant
5 oncogenic protein as claimed in Claim 4; and

collecting the recombinant oncogenic protein produced
from the culture.

11. An antibody which is a specific antibody generated
using the recombinant peptide as claimed in Claim 3 as an
immunogen.

12. The antibody as claimed in Claim 11, wherein the
antibody is reactive to a partial amino acid sequence of 623
to 1185 region of the amino acid sequence of SEQ. ID. No.1.

13. An antibody reagent kit for an antigen-antibody
reaction comprising the antibody as claimed in Claim 11,
available for detecting an oncogenic protein comprising the amino
acid sequence of SEQ. ID. No.1 or a peptide fragment derived
5 from the oncogenic protein.

14. A diagnosis kit being usable for detection of an
oncogenic protein comprising the amino acid sequence of SEQ.
ID. No.1 or a peptide fragment derived from the oncogenic protein

by means of an antigen-antibody reaction, comprising the antibody
5 as claimed in Claim 11.

15. An antisense polynucleotide comprising a
complementary nucleotide sequence to a partial nucleotide
sequence of the nucleotide sequence of SEQ. ID. No.2, which is
a DNA fragment having at least a length selected from the region
5 of 15 to 300 bases.

16. A probe hybridization kit available for detecting
an mRNA comprising the nucleotide sequence of SEQ. ID. No.2,
its partial nucleotide sequence or cDNA prepared by the mRNA,
comprising the antisense polynucleotide as claimed in Claim 15
5 as the DNA probe therein.

17. A diagnosis kit available for detecting expression
of mRNA comprising the nucleotide sequence of SEQ. ID. No.2,
which is translated into an oncogenic protein comprising the
amino acid sequence of SEQ. ID. No.1, by means of a probe
5 hybridization method, comprising the antisense polynucleotide
as claimed in Claim 15 as the hybridization probe.

18. A primer pair for PCR amplification of cDNA
comprising the nucleotide sequence of SEQ. ID. No.2, consisting
of paired primers of:

a nucleotide sequence :

5 5'-TTGGATCCATGACATCCAGATTTGGGAAAACATACAGTAGG-3'; and

a nucleotide sequence :

5'-TTGAATTCCTAGCAATGTTCCAAATATTCAATCACTCTAGA-3'.

19. A primer pair for PCR amplifying a partial chain in cDNA comprising the nucleotide sequence of SEQ. ID. No.2, consisting of paired primers of:

5'-GAATTCATAGGCACAGCGCTGAACTGTGTG-3'; and

5 5'-TTGAATTCCTAGCAATGTTCCAAATATTCA-3'.

20. A double strand of short-chain interfering RNA capable of inhibiting expression of mRNA comprising the nucleotide sequence of SEQ. ID. No.2 in a cervical cancer cell, wherein the siRNA has a nucleotide sequence:

5 CGGACTACCCTTAGCACAA.

21. A pharmaceutical composition for inhibiting expression of mRNA comprising the nucleotide sequence of SEQ. ID. No.2 in a cervical cancer cell to arrest growth of the carcinoma cell, comprising the double strand of short-chain interfering RNA as claimed in Claim 20.